

REMARKS:

Claims 1-12 are pending in the application. Claims 1-12 were rejected under 35 U.S.C. § 103(a). Claims 1, 5 and 9 are the only independent claims.

The specification has been amended to place the application in correct idiomatic English. Claims 1-12 have been amended to place the claims in better U.S. form without narrowing the scope of the claims as filed.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attachment is captioned "**Version with Markings to Show Changes Made.**"

The drawings were objected to for the reasons discussed on page 2 of the Office Action. The objection to the drawings is traversed for the following reasons.

It is respectfully submitted that the drawings conform with 37 CFR §§ 1.81-1.84. It is respectfully requested that if the Examiner disagrees with such an assertion, that the Examiner explicitly point out how the drawings do not conform with 37 CFR §§ 1.81-1.84.

Page 2 of the Office Action indicates that the "drawings are objected to because they are not clearly described in the specification, which made them hard to comprehend." It is true that the Examiner determines completeness and consistency of the drawings. However, as discussed in MPEP § 608.02(e) the Examiner should:

see to it that the Figures are correctly described in the brief description of the several views of the drawing section of the specification, that the reference characters are properly applied, that no single reference character is used for two different parts or for a given part in a modification of such part, and that there are no superfluous illustrations.

It is respectfully submitted that the drawings conform with Section 608.02(e) of MPEP.

Furthermore, it is respectfully submitted that the specification contains a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which pertains, or with which it is most clearly connected, and to make and use the same in accordance with 35 U.S.C. § 112, first paragraph. As evidence that the specification, which includes the drawings, conforms with 35 U.S.C. § 112, first

paragraph, it is respectfully submitted that the Examiner did not object to the specification or reject the claims under 35 U.S.C. § 112, first paragraph.

In light of the above discussion, Applicants respectfully submit that the drawings comply with 35 U.S.C. § 112, CFR §§ 1.81-1.84 and MPEP § 608.02(e). Applicants request that if the Examiner maintains the objection to the drawings, that explicit reasons therefore be provided. Otherwise, it is respectfully requested that the objection to the drawings be withdrawn.

The title of the invention has been changed to a new title that is clearly indicative of the invention to which the claims are directed, as required on page 2 of the Office Action.

It is respectfully submitted that claims 1-12 are patentable within the meaning of 35 U.S.C. § 103 over Applicants' admitted prior art in view of Cree and in further view of Higley, for the following reasons.

The present invention relates to a multi-media E-mail system and device for transmitting/receiving, through a network, multi-media E-mails each including various types of media information such as text, images and audio information.

In accordance with one aspect of the present invention, as a sender of an incoming mail possesses the incoming mail (that is, information identical to the received media information is stored as transmitted media information on the sender side), there is no need to send the received media information back to the sender if the return mail is composed by utilizing the media information included in the incoming mail (that is, if the return mail includes the received media information). Therefore, the multi-media E-mail to be transmitted to the sender does not include the received media information. On the contrary, the multi-media E-mail to be transmitted to the sender only includes information objects that were not included in the received multi-media E-mail.

In this manner, when a multi-media E-mail that comprises objects of various types of media information (each temporally and/or spatially related to one another) is transmitted/received through a network, the received media information do not go through the network twice. Therefore, information volume is reduced.

Independent claim 1 as amended, requires a multi-media E-mail method comprising, *inter alia*, transmitting the composed return mail back to the sender in the form of a multi-media E-mail including all the restored information objects and the restored positioning control information exclusive of the received information objects and the positioning control information. Claim 5 as amended requires a multi-media E-mail device comprising, *inter alia*, a transmission controlling part operable to transmit the return mail to the sender in the form of a multi-media E-mail including all the restored information objects and the restored positioning control information exclusive of the received information objects and the restored positioning control information. Claim 9 requires a recording medium having a computer readable program stored thereon, the program comprises instructions operable to instruct a computer to, *inter alia*, transmit the composed return mail to the sender in a form of a multi-media E-mail including all the restored information objects and the restored positioning control information exclusive of the received information objects and the positioning control information.

It is respectfully submitted that neither the Applicants' admitted prior art, Cree nor Higley, either singly or in combination teaches the above-identified limitations.

Page 3 of the Office Action indicates that the Applicants' admitted prior art "fails to teach a step of composing a return mail for restored incoming mail by utilizing said received media information." The Office Action further states that the Applicants' admitted prior art and Cree "fail to teach a step of transmitting the composed return mail back to the sender in the form of a multi-media E-mail including every media information included in the return mail exclusive of said received media information and the positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned." Page 4 of the Office Action then asserts that Higley teaches this limitation and cites Fig. 6; column 5, lines 9-12; column 7, lines 45-52 of the reference.

It is respectfully submitted that, contrary to the assertion on page 4 of the Office Action, Higley fails to teach the above-identified limitations. As described from line 65, column 2 through line 33 of column 3 of Higley, the reference deals with a method of transmitting a URL via E-mail from a sender to a receiver in a way that the URL is easily viewed by the receiver upon receipt.

Referring to column 5, lines 1-18, and Fig. 4 of the reference, it is described that a document (email) containing a URL is created and that the E-mail is transmitted to a receiver. Upon receipt of the email, the URL may be automatically dereferenced such that the receiver views the contents of the URL automatically (column 5, lines 27-53).

Higley fails to teach sending a reply email back to a sender which contains only the media information that was not included in the original email sent from the sender. Accordingly, it is respectfully submitted that Higley fails to teach the above-identified limitations.

In view of the above remarks, Applicants respectfully submit that claims 1, 5 and 9 would not have been obvious over the combination of the Applicants' admitted prior art in view of Cree and in further view of Higley, and urge that the rejection of claims 1, 5 and 9, and their respective dependent claims 2-4, 6-8, and 10-12, under 35 U.S.C. § 103(a) be withdrawn.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved in an Interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

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Version with Markings to
Show Changes Made

TITLE OF THE INVENTION

MULTI-MEDIA E-MAIL SYSTEM AND DEVICE
FOR TRANSMITTING A COMPOSED
RETURN E-MAIL

BACKGROUND OF THE INVENTION

5 Field of the Invention

The present invention relates to E-mail systems and devices, more particularly to a multi-media E-mail system and device for transmitting/receiving, through a network, multi-media E-mails each including various types of media information such as text,
10 images, audio information.

Description of the Background Art

In conventional multi-media E-mail systems, images (image information) or audio information associated with text (text
15 information) has been transmitted, for example, in an attachment file coming with a text file. In this system, when a receiver opens a multi-media E-mail, he/she will find two icons respectively indicate a text file and attachment file on a screen. With a click on these icons, the attachment file is opened with
20 images on the screen or audio from a speaker.

In such conventional E-mail systems that transmit images or audio information in the attachment file, however, audio associated with text does not synchronize with the text, or images are not switched in synchronization with audio. This is because,
25 timing is up to the receiver when to open the attachment file,

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#2 and #3, respectively, and then stores the same in the inputted information storing part 2505. Thereafter, the inputted image of human body is identified as an object #2, and image of landscape as an object #3.

5 Next, the sender records audio by using a microphone (not shown), for example, and then the audio inputting part 2502 receives the audio responding thereto. The inputted information editing part 2506 provides the inputted audio information with an identifier #4, and then stores the same in the inputted
10 information storing part 2505. Thereafter, the inputted audio information is identified as an object #4.

 Then, the sender taps on the not-shown keyboard, for example, so as to specify temporal and/or 2D spatial relationship among the objects by referring to the mail-composing window in FIG. 27
15 displayed on a not-shown display.

 In this manner, the mail is composed. The composed mail is displayed on the display via the inputted information presenting part 2507 (see FIG. 28). In FIG. 28, each of the objects is provided with the identifier, and also is perceivably
20 indicated when and where to be presented^{and} until when. ✓

 The composed mail has such internal data structure as shown in FIG. 29. Specifically, elements in the data structure are: a media identifier field storing media identifiers (# number) uniquely identifying media information; a media information field
25 storing substance (actual information) of the media information

receiving terminals shown in FIGS. 25 and 26, the media information included in the multi-media E-mail is each treated as an object, and is transmitted together with the control information indicating when and where to present each object.

5 Therefore, the media information in the multi-media E-mail can be each temporally and/or spatially related to one another. To be specific, in the mail, audio can synchronize with text on the screen, or images can be switched in synchronization with audio. Thanks to such improvement, E-mail will be widely prevalent within
10 the foreseeable future.

It is predictable, however, the information volume to be transmitted will see a leap as the multi-media E-mail system becomes prevalent, and resultantly networks will be deficient in capacity. At the same time, as the audio or image is much larger
15 in volume than the text, time and cost required for the communications will be an issue for users. Nevertheless, the other conventional system has not been working out and applying any solution to decrease the to-be-increased information volume.

20 SUMMARY OF THE INVENTION

Therefore, an object of the present invention is to provide ^asuch multi-media E-mail system and device that transmit^(S)/receive^(S),
through a network, multi-media E-mails each having various types of media information being temporally and/or spatially related
25 to one another, and further, reduce^(S) information volume going

through the network.

The present invention has the following features to solve the problem above.

A first aspect of the present invention is directed to a multi-media E-mail system for transmitting/receiving a multi-media E-mail including various types of media information and positioning control information indicating how the media information is each temporally and/or spatially positioned. ^{of the first aspect of the present invention} the multi-media E-mail system comprising:

~~a step of~~ receiving the multi-media E-mail;

~~a step of~~ restoring an incoming mail composed by a sender of the received multi-media E-mail by positioning the media information each included in the received multi-media E-mail according to the positioning control information included therein;

~~a step of~~ storing the media information included in the received multi-media E-mail as received media information;

~~a step of~~ composing a return mail for the restored incoming mail by utilizing the received media information; and

~~a step of~~ transmitting the composed return mail back to the sender in a form of a multi-media E-mail including every media information included in the return mail exclusive of the received media information and the positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned.

In this manner, when such multi-media E-mail that various types of media information included therein is each temporally and/or spatially related to one another is transmitted/received through a network, received media information does not go through the network twice. Therefore, information volume going therethrough can be reduced.

According to a second aspect, ^{further to} ~~in the first aspect,~~
~~in the step of~~ ^{when} composing the return mail,

the received media information is divided, and
the return mail is composed by using divided media information obtained by the division, and

^{when} ~~in the step of~~ transmitting the return mail, as an alternative to the divided media information, division controlling information indicating at where the received media information is divided is transmitted in addition to the multi-media E-mail.

As described above, in the second aspect, when a return mail is composed by utilizing received media information, any one of the received media information is divided into various divided media information. In this manner, one or more divided media information can be deleted, interchanged with another, or new media information can be inserted between any two successive divided media information (dividing position).

Further, when the received media information is divided, the multi-media E-mail to be transmitted to the sender further

includes division controlling information indicating at where the received media information is divided (for example, when the received media information is moving images, it is represented by frame number, and text data by line number) as an alternative
5 to the divided media information. Accordingly, as the divided media information is not sent back to the sender, information volume going through a network can be reduced.

According to a third aspect, ^{Further To} ~~in~~ the first aspect, the multi-media E-mail system further comprises ~~a step of~~ storing the
10 media information included in the multi-media E-mail to be transmitted as transmitted media information, wherein

~~in the step of~~ ^{when} restoring the incoming mail, by positioning the media information each included in the received multi-media E-mail and the transmitted media information according to the
15 positioning control information included in the multi-media E-mail, the incoming mail is restored.

As described above, in the third aspect, media information included in a mail (outgoing mail) to be transmitted is stored as transmitted media information. If a return mail for the
20 outgoing mail is received, media information included in the received multi-media E-mail and previously-stored transmitted media information is positioned according to positioning control information included in the multi-media E-mail. In this manner, the incoming mail (return mail) can be restored.

25 According to a fourth aspect, ^{Further To} ~~in~~ the third aspect, ~~in the~~

^{when}
~~step of~~ composing the return mail,

(the received media information is divided, and

the return mail is composed by using divided media information obtained by the division,

5 ^{when}
~~In the step of~~ transmitting the return mail, as an alternative to the divided media information, division controlling information indicating at where the received media information is divided is transmitted in addition to the multi-media E-mail, and

10 ^{when}
~~in the step of~~ restoring the incoming mail,

(the transmitted media information is divided according to the division controlling information included in the received multi-media E-mail, and

15 the incoming mail is restored by using the divided media information obtained by the division.

As described above, in the fourth aspect, when a return mail is composed by utilizing received media information, any one of the received media information is divided into various divided media information. In this manner, one or more divided media information can be deleted, interchanged with another, or new
20 media information can be inserted between any two successive divided media information (dividing position).

Further, when the received media information is divided, a multi-media E-mail to be transmitted back to the sender further
25 includes the divided media information indicating at where the

received media information is divided (for example, when the received media information is moving images, it is represented by frame number, and text data by line number) as an alternative to the divided media information. Accordingly, as the divided
5 media information is not sent back to the sender, information volume going through a network can be reduced.

Still further, when a return mail is received, divided media information is first generated from the transmitted media information according to the division controlling information,
10 and then the media information included in the received multi-media E-mail and the generated divided media information is positioned according to the positioning control information included in the multi-media E-mail. In this manner, the incoming mail (return mail) can be restored.

15 A fifth aspect of the present invention is directed to a multi-media E-mail device for transmitting/receiving a multi-media E-mail including various types of media information and positioning control information indicating how the media information is each temporally and/or spatially positioned. The
20 multi-media E-mail device ^{as the fifth aspect of the present invention} comprising:

a receipt controlling part in which the multi-media E-mail is received, and then an incoming mail composed by a sender of the received multi-media E-mail is restored by positioning every media information included in the received multi-media E-mail
25 according to the positioning control information included

therein;

↖ a first inputted information storing part storing the media information included in the multi-media E-mail received by the receipt controlling part as received media information;

5 ↖ an inputted information editing part composing a return mail for the incoming mail restored by the receipt controlling part by utilizing the received media information; and ↖

↖ a transmission controlling part transmitting the return mail composed by the inputted information editing part back to
10 the sender in a form of a multi-media E-mail including every type of the media information included in the return mail exclusive of the received media information and the positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned.

15 According to a sixth aspect, ^{further To} in the fifth aspect, ↖
↖ when a return mail is composed, the inputted information editing part ↖

↖ divides the received media information, and ↖
↖ composes the return mail by using divided media
20 information obtained by the division, and ↖

↖ the transmission controlling part transmits, as an alternative to the divided media information, division controlling information indicating at where the received media information is divided in addition to the multi-media E-mail.

25 According to a seventh aspect, ^{further To} in the fifth aspect, ↖
↖

the multi-media E-mail device further comprises a second inputted information storing part storing media information included in a multi-media E-mail to be transmitted by the transmission controlling part as transmitted media information,

5 wherein

the receipt controlling part restores an incoming mail by positioning each type of the media information included in the received multi-media E-mail and the transmitted media information according to the positioning control information included in the multi-media E-mail.

According to an eighth aspect, ^{further} in the seventh aspect, when a return mail is composed, the inputted information editing part

divides the received media information,

15 composes the return mail by using divided media information obtained by the division, and

the transmission controlling part transmits, as an alternative to the divided media information, division controlling information indicating at where the received media information is divided in addition to the multi-media E-mail, and

when a return mail is restored, the receipt controlling part

divides the transmitted media information according to the division controlling information included in the received multi-media E-mail, and

25 restores the incoming mail by using the divided media

information obtained by the division.

A ninth aspect of the present invention is directed to a recording medium on which a program, to be run in a computer device, for transmitting/receiving a multi-media E-mail including various types of media information and positioning control information indicating how the media information is each temporally and/or spatially positioned is recorded, the program

for realizing an operational environment on the computer device

comprising:

~~a step of receiving the multi-media E-mail;~~
~~a step of restoring an incoming mail composed by a sender of the multi-media E-mail by positioning every media information included in the received multi-media E-mail according to the positioning control information included therein;~~

~~a step of storing the media information included in the received multi-media E-mail as received media information;~~

~~a step of composing a return mail for the restored incoming mail by utilizing the received media information; and~~

~~a step of transmitting the composed return mail back to the sender in a form of a multi-media E-mail including every media information included in the return mail exclusive of the received media information and the positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned.~~

According to a tenth aspect, ^{further To} in the ninth aspect,

^{when}
~~in the step of composing the return mail,~~

includes instructions
The program is operable
to instruct the computer
device to divide

~~the received media information is divided, and~~

^{compose}

~~the return mail is composed by using divided media~~

includes instructions

information obtained by the division, and

5 ~~in the step of~~ ^{when} transmitting the return mail, as an
alternative to the divided media information, <sup>the program is operable
to instruct the computer
device to transmit</sup> division
controlling information indicating at where the received media
information is divided ~~is transmitted~~ in addition to the
multi-media E-mail.

10 According to an eleventh aspect, ^{further to} ~~in the ninth aspect,~~

~~the program for realizing the operational environment on
the computer device further comprises a step of storing the media
information included in the multi-media E-mail to be transmitted
as transmitted media information, wherein~~

15 ~~in the step of~~ ^{when} restoring the incoming mail, by positioning
every media information included in the received multi-media
E-mail and the transmitted media information according to the
positioning control information included in the multi-media
E-mail, the incoming mail is restored.

20 According to a twelfth aspect, ^{further to} ~~in the eleventh aspect,~~

~~in the step of~~ ^{when} composing the return mail,

<sup>the program includes instructions
operable to instruct the computer device
to divide</sup>

~~the received media information is divided, and~~

^{to compose}

~~the return mail is composed by using divided media~~

information obtained by the division,

the program includes instructions
to instruct the computer device

25 ~~in the step of~~ ^{when} transmitting the return mail, as an

alternative to the divided media information, ^{To Transmit} division
controlling information indicating at where the received media
information is divided ~~is transmitted~~ in addition to the
multi-media E-mail, and

5 ~~in the step of restoring the incoming mail,~~ ^{when}
~~the transmitted media information is divided~~ ^{The program includes instructions operable to instruct the computer device to divide}
according to the division controlling information included in
the received multi-media E-mail, and
^{to restore}
10 ~~the incoming mail is restored~~ by using the divided
media information obtained by the division.

A thirteenth aspect of the present invention is directed
to a method of supplying a program, to be run in a computer device,
for transmitting/receiving a multi-media E-mail including
various types of media information and positioning control
15 information indicating how the media information is each
temporally and/or spatially positioned to the computer device
through a network. ^{of the thirteenth aspect of the present invention} the method comprising:

~~a step of receiving the multi-media E-mail;~~
~~a step of restoring an incoming mail composed by a sender~~
20 of the received multi-media E-mail by positioning each of the
media information included in the received multi-media E-mail
according to the positioning control information included in the
multi-media E-mail;
~~a step of storing the media information included in the~~
25 received multi-media E-mail as received media information;

~~a step of~~ composing a return mail for the restored incoming mail by utilizing the received media information; and

~~a step of~~ transmitting the composed return mail back to the sender in a form of a multi-media E-mail including every media information included in the return mail exclusive of the received media information and the positioning control information indicating how the every media information in the return mail is temporally and/or spatially positioned.

According to a fourteenth aspect, ^{further to} ~~in the~~ thirteenth aspect, ^{when} ~~in the step of~~ composing the return mail,

the received media information is divided, and the return mail is composed by using divided media information obtained by the division, and

^{when} ~~in the step of~~ transmitting the return mail, as an alternative to the divided media information, division controlling information indicating at where the received media information is divided is transmitted in addition to the multi-media E-mail.

According to a fifteenth aspect, ^{further to} ~~in the~~ thirteenth aspect, the method of supplying a program further comprises ~~a step of~~ storing the media information included in the multi-media E-mail to be transmitted as transmitted media information, wherein

^{when} ~~in the step of~~ restoring the incoming mail, by positioning every media information included in the received multi-media E-mail and the transmitted media information according to the

positioning control information included in the multi-media E-mail, the incoming mail is restored.

According to a sixteenth aspect, ^{further to} ~~in the fifteenth aspect,~~ ✓
~~in the step of~~ ^{when} composing the return mail, ✓

5 the received media information is divided, and
 the return mail is composed by using divided media information obtained by the division, ✓

~~in the step of~~ ^{when} transmitting the return mail, as an ✓
alternative to the divided media information, division
10 controlling information indicating at where the received media information is divided is transmitted in addition to the multi-media E-mail, and

~~in the step of~~ ^{when} restoring the incoming mail, ✓

 the transmitted media information is divided
15 according to the division controlling information included in the received multi-media E-mail, and ✓

 the incoming mail is restored by using the divided media information obtained by the division.

These and other objects, features, aspects and advantages
20 of the present invention will become more apparent from the following detailed description of the present invention when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

25 FIG. 1 is a flowchart illustrating a multi-media E-mail

WHAT IS CLAIMED IS:

1. A multi-media E-mail ^{method of} ~~system for~~ transmitting/receiving
a multi-media E-mail including ^{in formation objects comprising at least one of} various types of media information
and positioning control information indicating how the media
information ^{objects are} ~~is each~~ temporally and/or spatially positioned, ^{said} ~~the~~
- 5 multi-media E-mail ^{method} ~~system~~ comprising:
~~a step of receiving the multi-media E-mail;~~
~~a step of restoring an incoming mail composed by a sender~~
~~of the received multi-media E-mail by positioning each of the~~
~~media information~~ ^{objects} included in the received multi-media E-mail
10 according to the positioning control information included
therein;
~~a step of storing the media information~~ ^{objects} included in the
received multi-media E-mail as received media information;
~~a step of composing a return mail for the restored incoming~~
15 mail ^{comprising restored information objects and restored positioning control information} by utilizing ^{indicating how the restored information objects are} ~~said~~ received media information; and ^{each temporally and/or spatially positioned}
~~a step of transmitting the composed return mail back to said~~ ^{the}
sender in a form of a multi-media E-mail including ^{all the restored} ~~every media~~
information ^{objects and the restored positioning control information} ~~included in the return mail~~ exclusive of ^{the} ~~said~~ received
media information ^{objects} and the positioning control information
20 ~~indicating how the every media information in the return mail is~~
~~each temporally and/or spatially positioned.~~
2. The multi-media E-mail ^{method} ~~system~~ according to claim 1,
wherein ^{when} ~~in said step of~~ composing the return mail,

^{objects are}
The ~~said received media information is divided, and~~
^{objects}
the return mail is composed by using ^{the} ~~divided media~~
5 ~~information~~ obtained by the division, and
^{wherein when}
in ~~said step of~~ transmitting the return mail, as an
alternative to ^{dividing} ~~said divided media information~~, division
controlling information indicating at where ^{the} ~~said received media~~
information ^{objects are} ~~is divided~~ is transmitted in addition to ^{the} ~~said~~
10 multi-media E-mail.

3. The multi-media E-mail ^{method} ~~system~~ according to claim 1,
further comprising ~~a step of~~ storing the media information
^{objects}
included in the multi-media E-mail to be transmitted as
transmitted media information, ~~wherein~~
5 ^{wherein when} ~~in said step of~~ restoring the incoming mail, by positioning
each media information ^{object} included in the received multi-media
E-mail and ^{the} ~~said~~ transmitted media information according to the
positioning control information included in the multi-media
E-mail, the incoming mail is restored.

4. The multi-media E-mail ^{method} ~~system~~ according to claim 3,
^P ^{wherein when} ~~wherein in said step of~~ composing the return mail,
^{the} ~~said received media information is divided, and~~
^{objects are}
the return mail is composed by using ^{the} ~~divided media~~
5 ~~information~~ ^{objects} obtained by the division,
^{wherein when}
in ~~said step of~~ transmitting the return mail, as an

alternative to said ^{dividing the} ~~divided~~ media information, ^{objects} division
controlling information indicating at where ^{the} said received media
information ^{objects are} ~~is~~ divided is transmitted in addition to ^{the} said
10 multi-media E-mail, and
^{wherein when} ~~in said step of restoring the incoming mail,~~
^{the} ~~said~~ transmitted media information ^{objects are} ~~is~~ divided
according to the division controlling information included in the
received multi-media E-mail, and
15 ~~the incoming mail is restored by using the divided~~
media information obtained by the division.

5. A multi-media E-mail device for transmitting/receiving
a multi-media E-mail including ^{information objects comprising at least one of} various types of media information
and positioning control information indicating how the media
information ^{objects are} ~~is~~ each temporally and/or spatially positioned, the
5 multi-media E-mail device comprising:

a receipt controlling part ^{operable to receive} in which the multi-media E-mail ^{from a} sender
~~is received,~~ and then ^{to subsequently} ~~an incoming mail composed by a sender of~~
~~the received multi-media E-mail is restored~~ ^{the received multi-media E-mail} by positioning every
media information ^{object} included in the received multi-media E-mail
10 according to the positioning control information included
therein;

a first inputted information storing part storing the media
information ^{objects} included in the multi-media E-mail received by said
receipt controlling part as received ^{objects} media information;

comprising restored information objects and restored
positioning control information indicating
how the restored information objects are
temporally and/or spatially positioned

- 15 an inputted information editing part ^{operable to compose} composing a return mail ~~for the incoming mail restored by said receipt controlling~~ part by utilizing ^{the} said received ^{objects} media information; and
- a transmission controlling part ^{operable to transmit} transmitting the return mail ~~composed by said inputted information editing part back to~~
- 20 ~~said~~ ^{the} sender in a form of a multi-media E-mail including ^{all the} ~~every~~ ^{restored} media information ^{objects} and the ^{restored} positioning control information ^{the} included in the return mail exclusive of ~~said~~ received media information ^{objects} and the ^{restored} positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned.

6. The multi-media E-mail device according to claim 5, wherein when a return mail is composed, said inputted information editing part ^{is operable to}

- ^{objects} divided ~~said~~ received media information, and
- 5 ~~composes~~ the return mail by using divided media information ^{objects} obtained by the division, and
- ^{wherein} ~~said~~ transmission controlling part ^{is operable to} ~~transmits~~, as an alternative to ~~said~~ ^{the} divided media information ^{objects}, division controlling information indicating at where said received media
- 10 information is divided in addition to ^{the} ~~said~~ multi-media E-mail.

7. The multi-media E-mail device according to claim 5, further comprising a second inputted information storing part storing the media information ^{objects} included in the multi-media E-mail

to be transmitted by said transmission controlling part as
5 transmitted ~~media~~ ^{objects} information, wherein
said receipt controlling part ^{is operable to} restore~~s~~ the incoming mail
by positioning each ~~media~~ ^{object} information included in the received
multi-media E-mail and ^{The} said transmitted media information
according to the positioning control information included in the
10 multi-media E-mail.

8. The multi-media E-mail device according to claim 7,
wherein (when a return mail is composed) ^{is operable to} said inputted information
editing part ^{The} divides said received ~~media~~ ^{objects} information, and
5 composes~~s~~ the return mail by using ^{The} divided ~~media~~ ^{objects} information
obtained by the division;
wherein ^{is operable to} said transmission controlling part transmits, as an
alternative to said divided ~~media~~ ^{objects} information, division
controlling information indicating at where said received media
10 information is divided in addition to said multi-media E-mail,
and

wherein (when a return mail is restored) ^{is operable to} said receipt controlling
part ^{The} divides said transmitted ~~media~~ ^{objects} information according
15 to the division controlling information included in the received
multi-media E-mail, and
restores~~s~~ the incoming mail by using the divided media

information obtained by the division.

9. A recording medium ^{having computer readable stored thereon} on which a program ^{for instructing} to be run in a computer device ^{operable to} for transmitting/receiving a multi-media E-mail ^{information objects comprising at least one of} including various types of media information and positioning control information indicating how the media information ^{objects are} is each

5 temporally and/or spatially positioned is recorded, the program ^{device} for realizing an operational environment on said computer device ^{instructions operable to instruct the computer to} comprising:

^{receive} a step of receiving the multi-media E-mail; ^{from a sender}

^{restore} a step of restoring an incoming mail composed by a sender

10 ~~of~~ the received multi-media E-mail by positioning each of the media information ^{objects} included in the received multi-media E-mail according to the positioning control information included therein;

^{objects} a step of storing the media information included in the

15 received multi-media E-mail as received media information;

a step of composing a return mail for the restored incoming mail by utilizing said received media information; and ^{objects}

^{transmit} a step of transmitting the composed return mail back to said sender in a form of a multi-media E-mail including every ^{the} media ^{the restored} information ^{objects and the restored positioning control information} and ^{to} the restored

20 information ^{objects} included in the return mail exclusive of said received media information ^{objects} and the positioning control information indicating how the every media information in the return mail is each temporally and/or spatially positioned.

comprising restored information objects and restored positioning control information indicating how the restored information objects are temporally and/or spatially positioned.

The instructions operable to instruct the computer to transmit it

10. The recording medium according to claim 9, wherein in ^{the instructions operable to instruct the computer to compose} ~~said step of composing the return mail~~ ^{comprises instructions operable to instruct the computer to divide}

^{the} ~~said received media information~~ ^{objects} ~~is divided, and~~

^{compos} ~~the return mail is composed by using divided media~~ ^{objects} ~~information obtained by the division, and~~

^{wherein} ~~in said step of transmitting the return mail,~~ ^{comprise instructions operable to instruct the computer to transmit it} as an ^{device} alternative to said divided media information, ^{division} controlling information indicating at where ^{the} ~~said received media~~ information ^{objects are} ~~is divided is transmitted~~ in addition to ^{the} ~~said~~

10 multi-media E-mail.

11. The recording medium according to claim 9, ^{device} ~~the program~~ ^{instruct the computer further comprise instructions operable to instruct the computer device} ~~for realizing the operational environment on the computer device~~ ^{TO} ~~further comprising a step of storing the media information~~ ^{store} ^{objects}

5 ~~transmitted media information~~ ^{objects} ~~wherein~~ ^{and R} ^{The instructions operable to instruct the computer device to restore the}

^{in said step of restoring said incoming mail, by positioning} each media information ^{object} included in the received multi-media E-mail and ^{The} ~~said~~ transmitted media information according to the positioning control information included in the multi-media

10 E-mails ~~the incoming mail is restored.~~

12. The recording medium according to claim 11, ^R wherein ^E ~~in said step of composing the return mail,~~

^{The} ~~said received media information~~ ^{objects} ~~is divided, and~~

The instructions operable to instruct the computer device to

Further instruct the computer device to divide

- The instructions operable
to instruct the computer
device to*
- To compose*
- 5 ~~the return mail is composed by using divided media~~
information ^{objects} obtained by the division,
- wherein*
- ~~in said step of transmitting the return mail, as an~~
alternative to ^{divide} ~~said divided media~~ ^{objects} information, ^{reason:} division
controlling information indicating at where ^{The} said received media
information ^{objects are} ~~is divided~~ ~~is transmitted~~ in addition to ^{The} said
- 10 multi-media E-mail, and
- wherein*
- ~~in said step of restoring the incoming mail,~~
- divide the* ~~said transmitted media information~~ ^{objects} ~~is divided~~
according to the division controlling information included in the
received multi-media E-mail ^{restore} and
- 15 ~~the incoming mail is restored by using the divided~~
~~media information~~ ^{objects} obtained by the division.

13. A method of supplying a program, to be run in a computer device, for transmitting/receiving a multi-media E-mail including various types of media information and positioning control information indicating how the media information is each

5 temporally and/or spatially positioned to the computer device through a network, the method comprising:

- a step of receiving the multi-media E-mail;
- a step of restoring an incoming mail composed by a sender of the received multi-media E-mail by positioning each of the
- 10 media information included in the received multi-media E-mail according to the positioning control information included